ABSTRACT

The invention provides a green fluorescent substance being higher in luminance of green than a conventional rare-earth activated sialon fluorescent substance and more excellent in durability than a conventional oxide fluorescent substance.

The inventors have succeeded in acquiring a fluorescent substance which is obtained by solid-dissolving Eu into a nitride or oxy-nitride crystal having a β-type Si_3N_4 crystal structure and emits a fluorescent light having a peak within a range of 500nm to 600nm in wavelength by being irradiated with an excitation source.